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ABSTRACT

Concern over reports that North Carolina elementary school students performed below the national norms in reading achievement led to the establishment of a pilot program to improve reading skills in grades one through three. The Primary Reading Program was initiated in 117 classrooms in 40 schools throughout the state; 117 control classrooms from the same schools were also evaluated. Features of this program included increased funding for instructional materials; use of volunteers and teacher aides for small group and individualized instruction; staff development; comprehensive testing; and availability of reading consultants. The program's effectiveness was measured with pretests and post tests of the Comprehensive Tests of Basic Skills and the Prescriptive Reading Inventory. The first year of evaluation indicated that the classes participating in the program scored significantly higher than the comparison control groups. Longitudinal studies investigating the effects of two years in the program were planned. The program development, data collection, test selection, and data analysis are described, as well as student and teacher characteristics, and teachers' attitudes toward the reading program and the tests used. Data resulting from the achievement tests are presented. (GDC)

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AN EVALUATION OF THE PILOT PROGRAM TO IMPROVE READING SKILLS IN NORTH CAROLINA

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THE PRIMARY READING PROGRAM EVALUATION IN NORTH CAROLINA

OVERVIEW

The concern over reading achievement in North Carolina intensified after a 1972 report from the State Assessment of Educational Progress showed North Carolina below national norms in achievement. Subsequent assessment reports reported some improvement in achievement but still indicated that North Carolina students were five to six months below national norms at the third grade and six to seven months behind at the sixth grade. This information, coupled with concern by the educational establishment and the public, led to the establishment of a pilot program to improve reading skills in the first, second, and third grades. The program began in July 1975 after being proposed by the State Board of Education and supported by the Legislature with a $2.75 million appropriation for two years. The evaluation of the program was mandated by the legislative intent accompanying the appropriation and the operational guidelines set for the program by the State Board of Education.

During the first year of the program, $750,000 was used for program operations in 117 classes in 40 schools throughout the state including an evaluation of the program. For purposes of the evaluation, 117 comparison classes in the same schools were also selected and evaluated. These comparison classes did not receive additional resources and strict attention reduced or prevented informal "leakage" of the treatment into the comparison classes.

The Primary Reading Program was based upon the assumption that teachers and their supervisors know how to teach reading but are constrained in

their effectiveness by a lack of resources and an effective system of supporting services, such as diagnostic testing, in-the-classroom consulting assistance, and administrative leadership for the school. To allow teacher to become more effective, the Primary Reading Program provided for:

- INCREASING the resources available to teachers for supplies and materials. Supplies and materials were provided at a cost of $5.70 per student in excess of the regular state and local allotment for supplies and materials. These materials were used to supplement already available materials.

- PROVIDING a teacher assistant (aide) to follow up reading activities with small groups or individual students. An aide was provided for each classroom and received training in reading along with the teacher.

- PROVIDING staff development which emphasized effective practices in teaching reading. Before the implementation of the program, teachers, aides, and principals were involved in a week of regional inservice training with all the benefit classes in their region. Ongoing inservice training continued throughout the school year in the specific administrative units.

- PROVIDING for comprehensive testing and use of test results. Monies were appropriated for diagnostic instruments and services, evaluation, and materials. Individualized test results were made available to principals, teachers, and parents.

- PROVIDING each child with individual attention from adult volunteers. Principals implemented the volunteer component of the reading program. The principals recruited, supervised training. and set operational procedures for the volunteers' work in the classroom. Volunteers received training from the teacher and aide as they worked in the classroom.

- INCREASING the consulting services for reading. Participating classrooms were visited periodically by local school districts specialists and regional center reading consultants. Following each visit the consultants reviewed the program and made written recommendations to the principals.

Teachers used their judgment in selecting appropriate approaches and methods for teaching reading to each child. Most teachers elected to use a variety of strategies for each child depending upon the student's level of development.

The effects of the Primary Reading Program were measured by administering, as pretests and posttests, two types of reading achievement tests: the Comprehensive Tests of Basic Skills (CTBS), and the Prescriptive Reading Inventory (PRI). Both comparison and benefit teachers verified that the reading objectives assessed by these tests had a high degree of relevance for their instructional program.

At the end of the first year of the evaluation, students in the Primary Reading Program classes scored significantly higher than comparable students in comparison classes. While both groups made better than average gains on the CTBS from pretest to posttest, when the groups were compared, the scores of the benefit classes were higher for all three grades. These results were presented to the State Board of Education at their August 1976 meeting.

Based upon the interim evaluation of the program, 180 additional classes were selected throughout North Carolina to implement the program in the fall of 1976. These classes were not included in the basic evaluation design and their results will not be reported as part of this study.

During the second year (1976-1977), the classes that began the Primary Reading Program are being continued and reevaluated. This phase of the evaluation will indicate the longitudinal effect of the program across two grade levels - grades 1 and 2 and grades 2 and 3. Data from these classes will be available in May 1977.

INTRODUCTION TO THE STUDY

In 1975 the General Assembly appropriated $2.75 million for a two-year program to improve reading achievement in the primary grades (1-3). During 1975-1976, $750,000 was allocated on a per class basis to increase the resources available to a classroom teacher. These funds provided each class with a full-time teacher aide ($4,531); additional supplies and materials were allocated to each class ($149); each teacher and aide received one week of staff development before school opened ($425 per class); and each pupil was tested with a standardized and a diagnostic test ($91/class). The total cost of the additional resources was $5,196 per class for a class of 26 students. Other indirect costs include: (1) supervision by regional reading consultants, (2) supervision by the local reading coordinator, (3) leadership of the building principal, and (4) assistance in interpreting test results by regional consultants.

Forty schools and 117 classes participated in the study. The schools were selected from those that volunteered to participate but consideration was given to include schools from each region of the state and from various settings, i.e. rural, urban, or suburban. School units were encouraged to nominate schools and classes that were typical for their area. Participating schools were selected from application forms submitted by superintendents and principals to the Department of Public Instruction's Division of Reading. These applications contained information on requirements which were necessary for acceptance into the program. After the school unit's expression of commitment was reviewed, the Division of Reading chose the schools to participate in the program in a manner which divided the schools as equally as possible among the State's eight education regions.

The specific components of the program are described as follows:

- INCREASING the resources available to teachers for supplies and materials. Supplies and materials were provided at a cost of $5.70 per student in excess of the regular state and local allotment for supplies and materials. These materials were used to supplement already available materials.

  Teachers reviewed their situation and requested those materials that were needed most. Their requests included expendable supplies, high interest paper back books, and teaching resource kits to complement the diagnostic testing.

- PROVIDING a teacher assistant (aide) to follow up reading activities with small groups or individual students. An aide was provided for each classroom and received training in reading along with the teacher.

  These aides were required to have a high school diploma and many of them exceeded this requirement. Some had previous experience as aides and a few held teaching certificates.

- PROVIDING staff development which emphasized effective practices in teaching reading. Before the implementation of the program, teachers, aides, and principals were involved in a week of regional inservice training with all the benefit classes in their region. Ongoing inservice training continued throughout the school year in the specific administrative units.

- PROVIDING for comprehensive testing and use of test results. Monies were appropriated for diagnostic instruments and services, evaluation, and materials. Individualized test results were made available to principals, teachers, and parents.

- PROVIDING each child with individual attention from adult volunteers. Principals implemented the volunteer component of the reading program. The principals recruited, supervised training, and set operational procedures for the volunteers' work in the classroom. Volunteers received training from the teacher and aide as they worked in the classroom.

- INCREASING the consulting services for reading. Participating classrooms were visited periodically by local school district specialists and regional center reading consultants. Following each visit the consultants reviewed the program and made written recommendations to the principals.

PROCEDURES OF THE STUDY

The budget for the Primary Reading Program was approved in June 1975. The program was to begin in September 1975. The evaluation was started in July 1975 with several activities such as design of the study, instrument selection, teacher assignments, and organizing for the evaluation occurring simultaneously. These activities are described below but not necessarily in sequential order.

Establishing Benefit and Comparison Classes

Having a randomly chosen comparison class from the same school to contrast with each of the Primary Reading Program classes was primary to the evaluation design. To accomplish this, principals in each of the participating schools were required to select two above-average teachers for grades 1, 2, and 3 and to assign each teacher with students who were closely matched on ethnic, socio-economic, and ability levels. Names of these teachers, along with their class rosters, were forwarded to the Division of Research in the State Department of Public Instruction. As a check on the principal's assignment process, the class rosters were examined to determine if the ethnic and sex distributions were equivalent. The two classes at each grade level were then randomly assigned to benefit or comparison groups. Thus, matched classes became the unit of random assignment.

In nine of the classes, a problem arose after the random assignment of teachers. In most of these cases, the teacher who was to receive the benefits of the Primary Reading Program was unable to do so because of personal or medical reasons. Where these random assignments were not accepted, principals were allowed to make substitutions at that grade level. Where substitutions were made, both the benefit and the comparison

classes for that grade level were deleted from the study.

Selecting the Tests and Surveys

During August 1975 the Research Division selected the evaluation instruments for the Primary Reading Program. The norm-referenced Comprehensive Tests of Basic Skills (CTBS) was selected for grades 1, 2, and 3, and the diagnostic Prescriptive Reading Inventory was selected for grades 2 and 3. Both tests served as pretests and posttests. A Student Information Questionnaire was developed and used to collect descriptive information about the students. Teachers completed a questionnaire on their perceptions of the Primary Reading Program, the classroom situation, and the school. In addition, teachers rated the relevance and importance of the objectives on both tests. Both of these teacher instruments were designed by staff in the Division of Research.

The selection of the CTBS and PRI was made after an intensive study of the available instruments. Measures were sought that could be used to determine readiness for beginning reading, to diagnose a student's strengths and weaknesses in specific reading skills and to determine the student's status on norm-referenced tests. Recommendations and ratings were completed from Buros Mental Measurements Yearbook and the Elementary School Test Evaluations from the Center for the Study of Evaluation at the University of California at Los Angeles. Reading and measurement specialists were consulted from each educational district to assist in the test selection procedure. These local consultants and consultants in the Division of Research reviewed specimen copies of the instruments meeting the evaluation requirements. They reviewed the compiled ratings

and then considered other applicable aspects of the tests. Their recommendations favored the CTBS and PRI on most criteria.

Except for grade 1, the same test levels were used for both pretests and posttests as indicated in Table 1.

TABLE 1

INSTRUMENTS USED TO MEASURE PUPIL PERFORMANCE

Grade	Pretest/Posttest
1	CTBS Level A*, Form S
2	CTBS Level C, Form S
3	CTBS Level 1, Form S PRI (Green Level)

*Level B was used for posttest.

The CTBS scores included a developmental growth indicator -- the expanded scale score. The score, a three-digit number ranging from 000 to 999, is a consistent measure for the three levels of the test administered in grades 1, 2, and 3. Since each test produced a total reading score (a composite of various subtest scores particular to a grade level), the evaluation used the total reading expanded scale score to measure the effectiveness of the program. Additional scores for the CTBS included raw scores, grade equivalent scores, national percentile scores, and local percentile scores.

The Prescriptive Reading Inventory (PRI) was a diagnostic test measuring the achievement of 34 basic skill areas in the second grade and 41 basic skill areas in the third grade. The information provided to the teachers on each child in the benefit classes indicated which skills the students had mastered, which ones needed remediation, and which skills

had not been mastered.

For evaluation purposes, the PRI class scores were reported as the average number of items answered correctly by the students.

Collection of Data

During September, manuals for test administration were written and disseminated with the tests in order to insure consistency in the test administrations. Regional research consultants and assistants distributed the materials and held workshops with local coordinators of the Primary Reading Program. To control for possible bias in test administration, the reading coordinator from the local school unit administration, the reading coordinator from the local school unit administratered the CTBS for the benefit and comparison classes. The PRI was a much longer test which was administered over several days. To accomplish this phase of the testing, teachers administered the tests to their own classes under the direction of the local reading coordinator.

Pretesting for the CTBS was accomplished during September 30 - October 6, 1975, while the PRI testing was during October 13-17. Completed test booklets were mailed to a Regional Center or to the State Offices for subsequent shipment to CTB/McGraw-Hill for scoring. Test results for the CTBS and the PRI were returned to the benefit teachers during January 1976. The CTBS scores were returned to the comparison teachers without assistance in interpretation. Since the PRI was part of the program component and was administered for both evaluation and diagnosis of instructional needs, these pretest results were not provided to the comparison teachers until the end of the year.

During January 1976, benefit and comparison teachers completed and returned the student information questionnaire, the teacher questionnaire, and the relevance of objectives rating scale.

Posttests for the first year were administered during May 3 - May 14, using the procedures of the pretests. Results of these tests were returned to benefit and comparison teachers by regional research consultants during staff development conferences held in each region in July and August 1976.

Testing for the second year of the evaluation began in September 1976. The CTBS, Level A was administered to the incoming first-grade students. Rising second graders, having taken the CTBS as pretests and posttests, were administered only the PRI. Third graders were administered no interim tests, since they had taken the CTBS and the PRI as pretests and posttests while in second grade.

Final results from the second year of the evaluation will be available in May 1977.

Data Analysis Procedures

The main purpose of the evaluation was to determine the total effect of additional resources on reading achievement in the primary grades. The evaluation, at the end of the first year, was to determine if the increased resources allocation had raised reading achievement in the primary grades. At the end of the second year, a two-year longitudinal study would determine the cumulative effect of the treatment for grades 1 and 2 and for grades 2 and 3. In the second year of the evaluation, the results from the first grade would be a replication of the first year's evaluation.

The statistical unit of analysis was the class average since classes, rather than students, were the units randomly assigned to benefit and comparison groups. Because classes had been matched by the principals, analyses were performed on the difference scores between the benefit and comparison classes.

Forming the difference scores between the benefit and comparison groups transformed the test scores into a common measure that could be combined and analyzed across grade levels. In the analysis, difference scores were grouped according to the grade level tested so that the grade level tested could also be entered as a factor to determine if a significant interaction existed between grade level and treatment effect. The treatment effect was represented by the magnitude of the difference scores from zero.

The analysis was accomplished by the following procedures. Class average posttest differences (benefit minus comparison) were calculated for each of the 108 pairs of classes. Similar differences were calculated using pretest scores. Each set of differences (pretest and posttest) was arranged into groups by grade. An analysis of covariance was performed on the scores with posttest difference scores as the dependent variable, pretest difference scores as the covariate, and grade as the independent variable. Separate analyses were performed for CTBS and PRI scores.

The first concern was whether grade was significant factor in the analysis. If so, there would be an interaction of the program benefits with grade level, i.e., the reading program performed differently within the grades, thus requiring separate analysis for each grade. If grade was not significant in the analysis, the program effect would be

considered as comparable among all grades. Program effects are implied by the significance of the value of the posttest difference scores after covariance adjustment by the pretest difference scores. An anlysis was performed to test the homogeneity of variance for the grades. Hartley's F_{max} statistic was used for this test.

Two non-parametric statistical procedures, the Sign Test and the Wilcoxon Test for Paired Cases also were used to test the significance of the benefit and comparison differences on the Prescriptive Reading Inventory. For the Sign Test, each of the 72 pairs of benefit/comparison classes were examined to determine whether the difference between benefit and comparison class averages favored the benefit or the comparison group. The probability was computed of obtaining this number of more of the cases favoring the benefit classes.

The Wilcoxon Test was similar to the Sign Test except the differences (benefit minus comparison) were ranked according to magnitude. The sum of the rank numbers corresponding to the cases in which the comparison class score exceeded the benefit class score was computed. The probability was computed of obtaining the particular sum, or smaller.

FINDINGS OF THE EVALUATION

Student Characteristics

Descriptive information about students in benefit and comparison classes was obtained by a student information questionnaire. Each teacher completed a separate questionnaire which included questions about each child's sex, race, and parental education.

Overall, 51.7% were boys and 48.2% were girls. Grades 1 and 3 contained 53.2% boys and 46 8% girls; grade 2 contained 49.1% boys and

50.9% girls.

Black students accounted for 32.2% of all students, which is slightly more than the state population figure of 29%. White students consituted 65.9% while all other races constituted 1.9%. Grade 1 was 30.9% Black and 67.4% White; grade 2 was 33.2% Black and 64.9% White; and grade 3 was 32.3% Black and 65.5% White.

Family incomes between $5,000 - $15,000 were reported for 59.6% of the students. Nearly 28% had family earnings of less than $5,000 and 11% came from families earning more than $15,000.

Thirty-eight percent of the student's mothers had finished high school, while only 32% of their fathers had done so. Some education beyond high school was attained by 17% of both fathers and mothers. However, 13% of the mothers and 9% of the fathers had less than eighth grade education.

Over 60% of all students had attended kindergarten. Almost 70% of first graders, 60% of second graders, and 54% of third graders had attended kindergarten.

Overall the pupils of the Primary Reading Program were closely representative of all primary pupils in North Carolina with respect to sex, race, family income, parental education and kindergarten experience.

Comprehensive Tests of Basic Skills Results

Tables 2, 3, 4, and 5 contain the results of the CTBS analyses. Table 2 shows average CTBS total reading expanded scale scores by grade for pretest and posttest. Table 3 shows the differences in benefit and comparison gains for the three grades. In Table 4, the analysis of covariance for the CTBS test scores reveals that students in the Primary Reading Program scored significantly higher than comparable students in the comparison classes. The entry labeled "regression" indicated a significant

regression of pretest scores to posttest scores. Hence, pretest scores are significantly correlated with posttest scores. The entry labeled "grade" revealed that the grade and treatment interaction was not significant.

The pretest scores in Table 5 for the Primary Reading Program and comparison classes were not significantly different. Hartley's F_{max} statistic was used to show the sample pretest difference score variance of 326.8, 308.8, and 240.6 for grades 1, 2, and 3 respectively to be homogeneous at the .05 level of significance.

Also the sample posttest difference score variance of 326.0, 526.1, and 616.0 for grades 1, 2, and 3 respectively were not significantly different at the .05 level of significance using Hartley's F_{max} statistic.

TABLE 2

AVERAGE CTBS STANDARD SCALE SCORES ON TOTAL READING ACHIEVEMENT
FOR BENEFIT AND COMPARISON CLASSES

	Benefit			Comparison		
	Pretest	Posttest	Gain	Pretest	Posttest	Gain
Grade 1	196.89	270.10	73.21	195.87	259.43	63.56
Grade 2	267.66	327.94	60.28	263.37	320.67	57.30
Grade 3	334.73	387.17	52.44	333.80	377.09	43.29

TABLE 3

AVERAGE PRETEST TO POSTTEST GAINS ON CTBS
TOTAL READING SCALE SCORES BETWEEN
BENEFIT AND COMPARISON CLASSES

	Reading Gains		
	Benefit	Comparison	Difference
Grade 1	73.21	63.56	9.65
Grade 2	60.28	57.30	2.98
Grade 3	52.44	43.29	9.15

TABLE 4

ANALYSIS OF COVARIANCE RESULTS FOR
CTBS EXPANDED SCALE SCORE DIFFERENCES

Source	SS	DF	MS	F	Probability of F this large
Within Cells	36924.266	104	355.041		
Regression	14279.426	1	14279.426	40.219	.001
Treatment	6651.156	1	6651.156	18.733	.001
Grade	627.883	2	313.941	.884	.416

TABLE 5

ANALYSIS OF VARIANCE RESULTS FOR
CTBS EXPANDED SCALE SCORE PRETEST DIFFERENCES

Source	SS	DF	MS	F	Probability of F this large
Within Cells	30804.621	105	293.377		
Treatment	631.022	1	631.022	2.151	.145
Grade	409.090	2	204.545	.697	.500

Prescriptive Reading Inventory Results

The PRI results are given in Tables 6, 7, 8, and 9. Tables 6 and 7 give the average number of items answered correctly on the PRI and the average gain from pretest to posttest. The gain shown in these tables favored the Primary Reading Program classes. In Table 8, the analysis of covariance results for the PRI indicated a significant treatment effect favoring the Primary Reading Program. The analysis of variance on the pretest scores in Table 9 indicated that the benefit and comparison classes were not significantly different at the beginning of the program. Table 9 shows that pretest and posttest scores were significantly related for the PRI and that the interaction between grade and treatment was not significant.

Although the PRI was a different type of test, the findings are identical with those of the CTBS.

The sample variances for the PRI pretest score differences were 70.0 and 85.3 for the second grade and third grade respectively. These variances were not significantly different at the .05 level of significance using Hartley's F_{max} statistic. A similar analysis for the posttest PRI score differences showed that there were no significant differences at the .05 level in the variances of 88.4 for the second grade and 143.0 for the third grade.

Table 10 and 11 give the results of the Sign Test and the Wilcoxon Test for Paired Cases. The results indicated no significant differences at pretest but significant differences at posttest favoring the classes in the Primary Reading Program.

TABLE 6

AVERAGE NUMBER OF ITEMS CORRECT ON
PRESCRIPTIVE READING INVENTORY

	Benefit			Comparison		
	Pretest	Posttest	Gain	Pretest	Posttest	Gain
Grade 2 (123 items)	75.50	102.56	27.06	75.12	99.99	24.78
Grade 3 (153 items)	87.99	113.13	25.22	86.05	107.52	21.47

TABLE 7

AVERAGE PRETEST TO POSTTEST GAINS ON PRI NUMBER OF
ITEMS CORRECT BETWEEN BENEFIT AND COMPARISON CLASSES

	Reading Gains		
	Benefit	Comparison	Difference
Grade 2	27.06	24.78	2.28
Grade 3	25.22	21.47	3.75

TABLE 8

ANALYSIS OF COVARIANCE RESULTS FOR
DIFFERENCE OF PRI TOTAL ITEMS CORRECT

Source	SS	DF	MS	F	Probability of F this large
Within Cells	6067.879	69	87.940		
Regression	1922.419	1	1922.419	21.860	.001
Treatment	821.957	1	821.957	9.347	.003
Grade	81.227	1	81.227	0.924	.340

TABLE 9

ANALYSIS OF VARIANCE RESULTS FOR
PRETEST DIFFERENCES OF PRI TOTAL ITEMS CORRECT

Source	SS	DF	MS	F	Probability of F this large
Within Cells	5405.832	70	77.226		
Treatment	82.561	1	82.561	1.069	.305
Grade	48.469	1	48.469	.628	.431

TABLE 10

RESULTS OF THE SIGN TEST OF PRETEST AND POSTTEST NUMBER OF ITEMS CORRECT ON THE PRI

	Pretest	Posttest
No. of classes out of 72 in which benefit class scores exceed comparison class scores	44	48
Probability of imbalance this large	0.08	0.0068

TABLE 11

RESULTS OF THE WILCOXON TEST OF PRETEST AND POSTTEST NUMBER OF ITEMS CORRECT ON THE PRI

	Pretest	Posttest
Sum of ranks having negative benefit minus comparison values	1077	844
Probability of sum this small	.1836	.0086

Teacher Survey Results

During the first week in December, 231 of 234 of the benefit and comparison teachers completed a comprehensive questionnaire. They were asked about their educational background, teaching methods, attitudes and progress of their students, effects of the program, and general satisfaction with some typical school environmental factors such as cooperation received from the school administration. Educational background results from these above average teachers revealed that they had experience similar to teachers in Grades 1-3 throughout North Carolina. For example, they had an average of seven years in their current school assignment and an average of twelve years teaching experience. These figures were consistent with those obtained from the State Assessment of Educational Progress which represented all teachers in North Carolina.

As revealed in other surveys of primary teachers, many different instructional practices were utilized. Most of the teachers (96.17%) used the basal approach. In this method, pupils have a basal textbook and work through a definite skill sequence with progressive vocabulary development. For instruction, most teachers divided the class into small groups based on subject level competence. Most of the teachers had seven, forty-minute periods for reading during the week.

In December, these teachers felt that 69% of the class was progressing at a satisfactory rate in reading. Forty-two percent of the teachers felt they had three to five students in their class that were exceptionally talented in reading. This same number of teachers reported that they also had six to ten students that were slow learners.

Benefit and comparison teachers were asked to judge each of the contributing components of the Primary Reading Program as well as other options that could be made available to them. The following table, which includes items ranging from air conditioning to a reduction in class size, indicates that teachers had a high degree of agreement with the present components of the Primary Reading Program.

TABLE 12

ITEMS FOR POSSIBLE INCLUSION IN
FUTURE READING PROGRAM BUDGET ALLOCATIONS

	Proportion of Teachers Selecting Items		
Item	Benefit	Comparison	Difference
Reading specialist	39.8	42.9	- 3.1
Clerical aides for groups of teachers	31.9	47.3	- 15.4
Teacher assistants (aides)	95.6	89.3	6.3
Diagnostic tests to ascertain student needs	73.5	67.9	5.6
School psychologists	31.9	35.7	- 3.8
Air conditioning for buildings	28.3	36.6	- 8.3
Volunteer programs in reading	66.4	57.1	9.3
Staff development workshops	60.2	50.9	9.3
Supplemental materials compatible with diagnostic tests to assist teacher with instruction	78.8	80.4	- 1.6
Supplies and materials to be ordered by the teacher	91.2	82.1	9.1
Additional primary teachers to reduce class size	49.6	64.3	- 14.7
Other	7.1	10.7	- 3.6

Relevance of the CTBS and PRI Objectives

During the month of October 1975, teachers of benefit and comparison classes involved in the Primary Reading Program indicated their judgment of the relevance for their classroom of the objectives measured by the Comprehensive Tests of Basic Skills (CTBS) and the Prescriptive Reading Inventory (PRI).

Included in their judgment was whether they taught the objective, whether the objective was attainable for children they taught, and whether the attainment of the objective was desirable.

Grade 1 teachers perceived letter names, letter sounds, and letter forms to be very important concepts measured by the CTBS. High importance was also perceived for word recognition and drawing simple conclusions. Recognition of terms and facts for order, placement and location and recognition of school related vocabulary were also rated between important and very important. Considered least important for first graders was the formation of plurals, verb tenses, subject verb pairing, possessive pronouns and objectives.

Second-grade teachers considered all but one of the CTBS objectives between very important and important. Selecting the best title for a passage was rated between important and somewhat important.

Of highest importance among CTBS objectives for third graders was determining word meaning from context and recalling facts and details from a passage. Another five objectives were rated between very important and important. Of less importance, between important and somewhat important, were the objectives of defining physical attributes of an object or person in a passage and identifying a writer's use of words to evoke a feeling or create an image.

Of the 56 PRI objectives for grades 2 and 3, 34 were designated for second graders taking the Red Level edition and 41 were designated for third graders taking the Green Level edition. Hence, 18 of the objectives were measured by both tests and, therefore, were rated by both second-grade and third-grade teachers.

Objectives about consonants, vowels, word meaning, word endings, and event sequence were rated most important of the PRI objectives by second-grade teachers. The least important objectives were concerning adjective forms, prepositional phrases, and sensory imagery.

The ranking of the third-grade PRI objectives revealed that objectives about consonants, vowels, sequence of events, and word structure were rated the most important. Least important were objectives about the perception of mood, time span of reading material, purpose of figurative language, and sensory imagery.